

Atlantic Richfield Company

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September 9, 2016

CERTIFIED – RETURN RECEIPT REQUESTED

Mr. Dave Seter
Remedial Project Manager
U.S. Environmental Protection Agency - Region 9
75 Hawthorne Street, SFD-9-1
San Francisco, CA 94105

**Subject: August 2016 Monthly Report, Yerington Mine Site, Lyon County, Nevada:
Administrative Order for Remedial Investigation and Feasibility Study (RI/FS),
CERCLA Docket No. 9 -2007-0005; Administrative Order on Consent, CERCLA
Docket No. 09-2009-0010**

Dear Mr. Seter:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency - Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared this August 2016 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

August 2016 Activities

Site Security and O&M Activities

- ☐ Continued Site O&M, security and bird deterrent activities. The two security cameras indicated no activity of concern.
- ☐ Wind dancers, bird deterrent flags and Wetland Wailers continued to be deployed in accordance with current EPA-approved bird deterrent protocols. To reduce birds from becoming habituated to the presence of wind dancers and flags, these devices were relocated as needed. Bird Gard towers 'A', 'B' and 'C' were not in operation throughout August due to dry Site conditions.
- ☐ Continued the EPA-approved bird deterrent schedule with at least two monitoring visits per day at all ponds. Observations were made within half an hour of dawn and dusk.
- ☐ PWS Pond water levels: North Cell = 0.0 feet; Middle Cell = 0.0 feet; South Cell = 0.0 feet.
- ☐ As of August 31, the Arimetco FMS pond levels were: Phase 1 Pond = 3.37 feet; FMS Evaporation Pond A = 8.47 feet; FMS Evaporation Pond B = 5.43 feet; FMS Evaporation Pond C = 5.47 feet; VLT Pond = 9.93 feet; Slot Pond = 1.68 feet. The freeboard level in FMS Evaporation Pond A on August 31 was approximately 1.65 feet. Fluid transfers in August consisted of 10,300 gallons from the Phase 1 Pond to Pond C, 155,897 gallons from the Slot Pond to Pond C and 340,690 gallons from the Slot Pond to the VLT Pond (to facilitate performance of the SPS enhanced evaporation pilot study system). SPS continued to operate the enhanced evaporation pilot study system at the VLT Pond. The flow meter on the VLT Pond was out of service from August 25-31 (while fluids were being transferred from the Slot Pond). See attached monitoring data.
- ☐ No rainfall occurred during August and total Site rainfall remained at 3.1 inches since January 1, 2016. See attached monitoring data.

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August 2016 Activities - Continued

Site Security and O&M Activities - Continued

- Approximately 19,363 gallons of solution were pumped from the leak detectors in August including 1,568 gallons from the VLT ditches and Sediment Pond, and 17,566 gallons from the Slot HLP perimeter collection ditch. See attached monitoring data.
- FMS pond samples for total dissolved solids (TDS) analyses and electrical conductivity (EC) measurements were obtained on August 24 from various depths and locations around the ponds.
- Participated in a tour with EPA and others on August 17 to review the enhanced evaporation test at the VLT heap leach pad. Reviewed FMS data in support of the test.

Site Characterization Activities

- Site-wide monthly groundwater elevation measurements were obtained August 22-23 from all monitor wells.
- A Pit Lake water elevation of 4,234.84 feet amsl was recorded on August 23 from the pressure transducer, a decrease of 0.13 feet since July 23, 2016. The pit lake elevation has risen approximately 0.84 feet since August 23, 2015.
- Performed the 3Q 2015 groundwater monitoring event August 1-18.
- Continued the compilation of data for inclusion in the 1Q 2016 Groundwater Monitoring Report (GMR) and the 1Q 2016 Domestic Well Monitoring Report (DWMR).
- Work relating to the extension of Yerington City municipal water service to certain properties previously included in the Domestic Well Monitoring Program and Bottled Water Program, including disconnection or abandonment of domestic wells for properties now receiving City water, was effectively completed as of August 1.
- A new owner acquired the property with domestic well DW-205.
- Continued the preparation of a technical memorandum describing proposed modifications to the Site-wide groundwater monitoring program.
- Continued work on the Draft Process Areas (OU -3) RI Report. A revised OU -3 Human Health Risk Assessment Tech Memo (No.3) was transmitted to EPA on August 5.
- Continued to compile data resulting from the Wabuska Drain (OU-7) Phase 1 field sampling and analytical activities.
- Drilling and sampling activities for the Evaporation Ponds Phase 1 FSAP continued with: 1) the collection of a groundwater sample from EP -GC-3; and 2) the collection of five soil samples from EP-GC-1, -2, -3, -20 and -22. All previously installed temporary wells for the program were subsequently abandoned (Yellow Jacket Drilling left the Site after the wells were abandoned).
- Twenty-six groundwater samples (not including quality control samples) collected from beneath the Evaporation Ponds were submitted to the University of Arizona for hydrologic tracer (34S and 18O) analyses. Protective covers were ordered for the four vadose zone monitoring locations.
- Participated in a groundwater technical meeting on August 2 to discuss how to move forward with Site-Wide Groundwater (OU-1) FS-related activities.
- John McMillian and Julian Ishaw (CB&I) were on Site for a tour on August 3.
- Attended a Community Meeting on August 16.
- Routine database management in support of Site investigations and monitoring activities.

Planned September/October 2016 Activities

Site Security and O&M Activities

- Continue routine Site O&M, security and bird deterrent activities.
- Continue FMS pond sampling for total dissolved solids (TDS) analyses and electrical conductivity (EC) measurements.
- Perform the dust suppression activity on the Evaporation Ponds.
- Initiate the update to FMS water balance model to include the effects of the SPS enhanced evaporation test on the VLT heap leach pad.

Planned September/October 2016 Activities - continued

Site Characterization Activities

- ☐ Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- ☐ Prepare for and perform the 3Q 2016 domestic well monitoring event (September). Wells at properties that have received City of Yerington water system connections will not be sampled.
- ☐ Continue the Bottled Water Program. Properties that have received City of Yerington water system connections are gradually being removed from the Program.
- ☐ Submit a letter to EPA in early September that : 1) documents the extension of Yerington City municipal water service to certain properties previously included in the Domestic Well Monitoring Program and Bottled Water Program; AND 2) requests confirmation that ARC will no longer be required under the Unilateral Administrative Order for Initial Response Activities, Docket No. 9 - 2005-0011 and the Administrative Order on Consent and Settlement Agreement for Removal Action and Past Response Costs, Docket No. 09-2009-0010 to perform domestic well monitoring or provide bottled water at/to any property that receives City of Yerington municipal water service or is receiving treated domestic water from the Yerington Paiute Tribe public water system.
- ☐ Continue the compilation of data for inclusion in the 1Q 2016 GMR and 1Q 2016 DWMR.
- ☐ Complete and transmit the Tech Memo describing proposed modifications to the Site-wide groundwater monitoring program. Continue discussions with EPA regarding the proposed reductions to the groundwater and domestic well monitoring programs including analytical parameters, wells to be sampled and the quarterly/annual report contents.
- ☐ Continue to compile information for inclusion in the OU -1 RI Report, including an analysis of chemical concentration stability in Site-wide groundwater monitor wells.
- ☐ Complete and transmit the Draft Process Areas (OU-3) RI Report.
- ☐ Continue to compile OU-7 field and laboratory analytical data into tables and maps for use in a future technical meeting with EPA and other stakeholders.
- ☐ Compile information regarding the drilling, testing and sampling of soils and groundwater in the Evaporation Ponds into a DSR.

Please contact me at (657) 529-4581 or via e-mail at jack.oman@bp.com if you have any questions or comments about this August 2016 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Harry Ball, EPA – via electronic mail
Dante Rodriguez, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Jeff Collins, NDEP – via electronic mail
Jeryl Gardner, NDEP – via electronic mail
Dave Davis, BLM – via electronic mail
Dan Newell, City of Yerington – via electronic mail
Phyllis Hunewill – via electronic mail
Jim Sanford, MVEC – via electronic mail
Tom Grady, Nevada State Assembly – via electronic mail

Chairwoman Thom, YPT – via electronic mail
Ginny Hatch, YPT – via electronic mail
Deborah Dunn, YPT – via electronic mail
Dietrick McGinnis, McGinnis and Associates – via electronic mail
Tom Bowden, Ridolfi, Inc. – via electronic mail
Chairman Sanchez, WRPT – via electronic mail
Cynthia Ocegüera, WRPT – via electronic mail
Ron Halsey, Atlantic Richfield Company – via electronic mail
Nathan Block, Atlantic Richfield Company – via electronic mail
Patricia Gallery, Atlantic Richfield Company – via electronic mail
Brian Johnson, Atlantic Richfield Company – via electronic mail
John Batchelder, EnviroSolve – via electronic mail
Dan Ferriter, Copper Environmental – via electronic mail
Mike Mahon, Copper Environmental – via electronic mail
Randy Miller, Broadbent – via electronic mail
Travis Phelps, Arcadis – via electronic mail
Jim Chatham, Atlantic Richfield Company – via electronic mail
Adam Cohen, Davis Graham & Stubbs – via electronic mail
Bill Duffy, Davis Graham & Stubbs – via electronic mail
Tom Patton, Singatse Peak Services, LLP – via electronic mail
Taurus Massey, Singatse Peak Services, LLP – via electronic mail
David Peri, Peri and Sons – via electronic mail
John McMillan, CBI – via electronic mail
Julian Isham, CBI – via electronic mail
Victor Early, Tetra Tech – via electronic mail
Colin Lee, Tetra Tech – via electronic mail
Ken Greene, CH2M Hill – via electronic mail
Peggy Pauly, YCAG – via electronic mail
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